

### Claims

1           1. A viral expression vector comprising a nucleic  
2 acid which comprises (1) a transcriptional start site; (2) a  
3 promoter operably linked to the transcriptional start site;  
4 and (3) an enhancer operably linked to the promoter, the  
5 enhancer comprising the DNA sequence of SEQ ID NO:1 or the  
6 RNA equivalent thereof.

1           2. The viral expression vector of claim 1, wherein  
2 the vector is a retrovirus.

1           3. The viral expression vector of claim 1, wherein  
2 the promoter drives transcription of a mRNA encoding a  
3 polypeptide, the transcription beginning from the  
4 transcriptional start site.

1           4. The viral expression vector of claim 3, wherein  
2 the polypeptide is a growth hormone.

1           5. The viral expression vector of claim 1, wherein  
2 the promoter is a tissue-specific promoter.

1           6. The viral expression vector of claim 5, wherein  
2 the promoter is a  $\beta$ -globin promoter.

1           7. The viral expression vector of claim 1, wherein  
2 the enhancer comprises SEQ ID NO:2 or the RNA equivalent  
3 thereof.

1           8. The viral expression vector of claim 7, wherein  
2 the enhancer comprises SEQ ID NO:3 or the RNA equivalent  
3 thereof.

1           9. The viral expression vector of claim 1, wherein  
2 the nucleic acid further comprises a transcriptional  
3 termination signal that terminates transcription from the  
4 transcriptional start site.

1           10. The viral expression vector of claim 9, wherein  
2 the vector is a retrovirus.

1           11. The viral expression vector of claim 9, wherein  
2 the promoter drives transcription of a mRNA encoding a  
3 polypeptide, the transcription beginning from the  
4 transcriptional start site.

1           12. The viral expression vector of claim 9, wherein  
2 the transcriptional termination signal is a polyadenylation  
3 signal.

1           13. A transgenic animal whose somatic and germ line  
2 cells contain at least one copy of a transgene comprising  
3 (1) a transcriptional start site; (2) a promoter operably  
4 linked to the transcriptional start site; and (3) an  
5 enhancer operably linked to the promoter, the enhancer  
6 comprising the nucleotide sequence of SEQ ID NO:1,  
7 wherein the transgenic animal expresses a transcript  
8 driven by the promoter, the level of expression in at least  
9 one cell type of the animal being proportionally dependent  
10 on the copy number of the transgene.

1           14. The transgenic animal of claim 13, wherein the  
2 animal is a rodent.

1           15. The transgenic animal of claim 14, wherein the  
2 animal is a mouse.

1           16. The transgenic animal of claim 15, wherein the  
2 somatic and germ line cells contain more than 5 copies of  
3 the transgene.

1           17. The transgenic animal of claim 16, wherein the  
2 somatic and germ line cells contain more than 15 copies of  
3 the transgene.

1           18. The transgenic animal of claim 17, wherein the  
2 promoter drives transcription of a mRNA encoding a  
3 polypeptide, the transcription beginning from the  
4 transcriptional start site.

1           19. The transgenic animal of claim 18, wherein the  
2 polypeptide is a growth hormone.

1           20. The transgenic animal of claim 19, wherein the  
2 promoter is a  $\beta$ -globin promoter, and the at least one cell  
3 type is a erythroblast.

1           21. The transgenic animal of claim 20, wherein the  
2 enhancer comprises SEQ ID NO:2.

1           22. The transgenic animal of claim 21, wherein the  
2 enhancer comprises SEQ ID NO:3.

1 23. A method of expressing a transcript in an  
2 animal, the method comprising administering to the animal a  
3 nucleic acid comprising (1) a transcriptional start site for  
4 the transcript; (2) a promoter operably linked to the  
5 transcriptional start site; and (3) an enhancer operably  
6 linked to the promoter, the enhancer comprising the DNA  
7 sequence of SEQ ID NO:1 or the RNA equivalent thereof.

1 24. The method of claim 23, wherein the nucleic  
2 acid is administered by parenteral injection.

1 25. The method of claim 23, wherein the nucleic  
2 acid is administered via a viral expression vector.

1 26. The method of claim 23, wherein the transcript  
2 is a mRNA encoding a polypeptide.

1 27. The method of claim 26, wherein the polypeptide  
2 is a growth hormone.

1 28. The method of claim 23, wherein the promoter is  
2 a  $\beta$ -globin promoter.

1 29. The method of claim 23, wherein the enhancer  
2 comprises SEQ ID NO:2 or the RNA equivalent thereof.

1 30. The method of claim 23, wherein the enhancer  
2 comprises SEQ ID NO:3 or the RNA equivalent thereof.

1 31. The method of claim 23, wherein the nucleic  
2 acid further comprises a transcriptional termination signal.

1            32. The method of claim 31, wherein the  
2    transcriptional termination signal is a polyadenylation  
3    signal.

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